REMARKS

Claim 22 has been amended. Claims 1-31 remain pending in the application. Reconsideration is respectfully requested in light of the following remarks.

Section 103(a) Rejection:

The Examiner rejected claims 1-7, 9-18, 20-28 and 31 under 35 U.S.C. § 103(a) as being unpatentable over Smith (U.S. Patent 5,457,694) (hereinafter, "Smith") and Masiewicz, et al. (U.S. Patent 5,784,390) (hereinafter, "Masiewicz"). Applicants traverse this rejection and submit that these claims are distinguishable over the cited references, as set forth in greater detail below.

Smith in view of Masiewicz fails to teach or suggest all of the limitations of Applicants' claim 1. Specifically, neither Smith nor Masiewicz teaches or suggests a system including data capture logic configured to capture data events from a nondeterministic data bus; a system memory including a plurality of addressable locations, wherein a subset of said plurality of addressable locations is configured as a data event buffer; a direct memory access (DMA) transfer engine coupled to said data capture logic and to said system memory and configured to perform a DMA transfer operation of said captured data events from said data capture logic to a region of said data event buffer as portions of said captured data events become available from said data capture logic; and an application configured to access said data event buffer to process said captured data events without said DMA transfer operation being stopped; wherein in response to said region of said data event buffer being filled, said DMA transfer engine is further configured to perform said DMA transfer operation to a different region of said data event buffer without said DMA transfer operation being stopped.

The Examiner acknowledges that Smith fails to teach or suggest detecting that a region of a data event buffer is full and responsively performing a DMA transfer operation to a different region of the data event buffer without stopping the DMA transfer

operation, and relies on Masiewicz to teach this limitation. Specifically, the Examiner relies on Masiewicz, col. 22-26 to disclose an error correction system for an ATA storage device interface that detects an overflow condition by asserting a count overflow signal during a DMA transfer. However, Masiewicz specifically teaches that in the case where the overflow signal is asserted, the DMA transfer is throttled (col. 22, lines 53-57). Masiewicz unambiguously states that throttling of a transfer is equivalent to suspending a transfer: "The host may also suspend (throttle) data transfers for the same reason as the device." (col. 13, lines 59-60) However, suspending a DMA transfer in response to a full buffer or overflow condition is **precisely the opposite** of continuing to perform a DMA transfer to a different region of a data event buffer without stopping the DMA transfer operation, as recited in claim 1.

Additionally, there exists no motivation to combine Smith and Masiewicz in the manner the Examiner proposes. The Examiner states that "[i]t would have been obvious to one of skill at the time the invention was made for Smith to implement the error correction system of Masiewicz that detects an overflow during a DMA transfer because doing so would ensure a faster more reliable data transfer across the host and the ATA interface." Smith is directed to an analyzer for capturing and recording events that occur on an ATA interface (Smith, Abstract). Smith discloses that DMA transfer events may occur between a computer system 101 and a data storage device 103 via an ATA bus 102 (e.g., Smith, FIG. 5, col. 6, lines 8-11 and col. 14, line 41 – col. 15, line 29). However, Smith does not disclose in any way that captured events may themselves be transferred by a DMA transfer engine. That is, in Smith, DMA transfers may form observable events that may be captured. However, Smith does not disclose in any way the use of DMA transfers to manipulate events (whether DMA transfer events or other events) once captured. Smith and Masiewicz operate at two entirely different levels of abstraction, and the overflow detection technique of Masiewicz has no evident bearing on the operation of Smith to capture and process ATA interface events.

For at least the foregoing reasons, the rejection of claim 1 is unsupported by the cited references, as is the rejection of independent claims 11 and 22 having limitations similar to claim 1.

With reference to claims 2, 3, 13, 14, 20, 23 and 24, the Examiner asserts that neither Smith nor Masiewicz discloses the limitation where the data event buffer is circular or linear, but that "one of ordinary skill would readily recognize that a circular or linear buffer is well known in the art, thereby making use of these types of well known buffers obvious to one of ordinary skill." With reference to claims 5, 16 and 26, the Examiner asserts that although neither Smith nor Masiewicz discloses the limitation where a nondeterministic data bus conforms to the IEEE-488 GPIB standard, "[n]onetheless, however, one of ordinary skill would readily recognize that the IEEE-488 GPIB standard is well known in the art, thereby making use of this type of bus obvious to one of ordinary skill." Applicants traverse the Examiner's statements.

These features may be well known in other contexts. However, as the Federal Circuit stated in *In re Kotzab*, 55 USPQ2d 1313, 1316 (Fed. Cir. 2000):

> Most if not all inventions arise from a combination of old elements. However, identification in the prior art of each individual part claimed is insufficient to defeat patentability of the whole claimed invention.

Thus, the Examiner's assertion that circular and linear data event buffers as well as the IEEE-488 bus are well known does not establish that the prior art teaches Applicants' specifically claimed application of these elements in combination with the other claimed elements. Moreover, as the Court of Appeals for the Federal Circuit recently explained in *In re Sang Su Lee*, Docket No. 00-1158 (Fed. Cir. January 18, 2002), conclusory statements such as those provided by the Examiner that a claim limitation is well known or common knowledge do not fulfill the Examiner's obligation. "Deficiencies of the cited references cannot be remedied by the [Examiner's] general conclusions about what is 'basic knowledge' or 'common sense.'" *In re Zurko*, 59 USPQ2d 1693, 1697 (Fed. Cir. 2001). "Common knowledge and common sense ... do not substitute for authority." *In re San Su Lee*. Common knowledge "does not in and of itself make it so" absent evidence

of such knowledge. *Smiths Industries Medical Systems, Inc. v. Vital Signs, Inc.*, 51 USPQ2d 1415, 1421 (Fed. Cir. 1999). Thus, Applicants submit that the rejection of these claims is improper.

Applicants further note that numerous ones of the dependent claims recite additional features not taught or suggested by any of the cited references taken individually or in any combination. However, as the independent claims have been shown to be distinguishable, no further discussion of the dependent claims is necessary at this time.

CONCLUSION

Applicants submit the application is in condition for allowance, and prompt notice to that effect is respectfully requested.

If any extension of time (under 37 C.F.R. § 1.136) is necessary to prevent the above-referenced application from becoming abandoned, Applicants hereby petition for such an extension. If any fees are due, the Commissioner is authorized to charge said fees to Meyertons, Hood, Kivlin, Kowert, & Goetzel, P.C. Deposit Account No. 501505/5150-83700/RCK.

Also enclosed herewith are the following items:

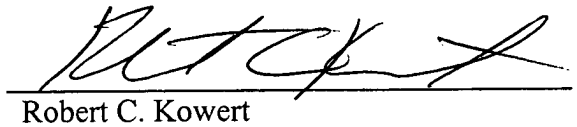
☒ Return Receipt Postcard

☐ Petition for Extension of Time

☐ Notice of Change of Address

☐ Other:

Respectfully submitted,



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Date: December 29, 2005